REVISION B



Perform Executive Secretary Responsibilities for the Human Exploration and Development of Space (HEDS) Assurance Board (HAB)

Michael A. Greenfield, Ph.D. Acting Associate Administrator for Safety and Mission Assurance February 1, 2002

Date

DOCUMENT HISTORY LOG

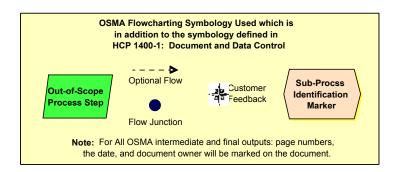
Status (Draft/ Baseline/ Revision/ Canceled)	Document Revision	Effective Date	Description
Baseline		January 13, 2000	
Revision	А	April 14, 2000	Editorial corrections to the flowchart in Section 5, reference 4.1, step 6.01 and Appendix A; Changed step 6.07.
	В	February 1, 2002	Added customer list, customer feedback to sections 5, and steps 6.05, 6.09, and 6.11. Editorial correction to reference 4.2 and steps 6.06, 6.07, and 6.12. Note added on continual improvement to flowchart in section 5. Updated Appendix A with current minutes.

HQOWI Author: QE/Pete Rutledge

OSMA Staff Member Responsible for this HQOWI: QE/Pete Rutledge

Customers for this HQOWI: Internal: AA/SMA & HAB Members

External: none



1. Purpose

The purpose of this Office of Safety and Mission Assurance (OSMA) Headquarters Office Work Instruction (HQOWI) is to document the process for the Executive Secretary function for the Human Exploration and Development of Space (HEDS) Assurance Board (HAB). This HQOWI also specifies the Quality Records associated with the process.

2. Scope and Applicability

This OSMA HQOWI is applicable to the individual in OSMA who is named to serve as the Executive Secretary (ES) of the HAB and the Code QE Secretary who maintains the Quality Records for the HAB ES.

3. Definitions

- 3.1. <u>AA/SMA</u>: Associate Administrator for Safety and Mission Assurance
- 3.2. AI: Action Item
- 3.3. ES: Executive Secretary
- 3.4. HAB: HEDS Assurance Board.
- 3.5. <u>HATS</u>: Headquarters Action Tracking System
- 3.6. HEDS: Human Exploration and Development of Space.
- 3.7. OSMA: Office of Safety and Mission Assurance.
- 3.8. QE Sec'y: The secretary of the Enterprise Safety and Mission Assurance Division (Code QE)
- 3.9. QMS: Quality Management System

4. Reference Documents

The documents listed in this section are used as reference materials for performing the processes covered by the Quality Management System (QMS). Since all NASA Headquarters Level 1 (QMS Manual) and level 2 (Headquarters Common Processes) documents are applicable to the QMS, they need not be listed in this Section unless specifically referenced in this OSMA HQOWI.

- 4.1. Safety and Mission Assurance for the Human Exploration and Development of Space (HEDS)
 Enterprise Agreement
- 4.2. MSFC Communications telecon sheet

(see http://www.hq.nasa.gov/office/codec/codeci/help/telecoms/audio.htm).

5. Flowchart

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6. Procedure

Note: The NASA Administrator has asked to participate in the HAB Meetings approximately twice a year. The meetings attended by the NASA Administrator are held faceto-face at NASA HQ.

6.01 HAB Executive Secretary (ES) Initiate Process:

The HAB ES initiates the process in order to prepare for the next regular monthly (or special) meeting of the HAB. HAB meetings are normally held on the first Monday of each month from 3:30 PM to 4:30 PM Eastern Time. A nominal schedule for one HAB meeting is contained in Appendix A.

6.02 HAB ES

Propose Date for Next Meeting:

The HAB ES proposes a HAB meeting date and location. The HAB ES coordinates with AA/SMA's Secretary, to be sure the AA/SMA will be able to attend; otherwise, they jointly determine an alternate date.

6.03 AA/SMA with HAB ES Approve Date and Special Topics:

The AA/SMA, with the HAB ES, reviews the proposed date for the next HAB meeting. The AA/SMA identifies any special topics which need to be reviewed by the HAB.

6.04 HAB ES

Draft Agenda:

The HAB ES prepares a draft agenda for the meeting. A sample draft agenda is provided in Appendix B-2. Agenda may be changed as needed to accommodate special presentations. The HAB ES will coordinate need for special presentations with AA/SMA. The HAB ES will review the minutes from previous meetings and put any open action items or any open issues from a previous meeting on the agenda for review. Also, the HAB ES will have the Code QE Secretary check the Headquarters Action Tracking System (HATS) (see HQOWI 1450-Q027) for any special presentations it might require to close any actions. Other inputs for the HAB agenda may come from a variety of sources such as: mishap investigations, surveys, Aerospace Safety Advisory Panel reviews and the results of Performance Based Mission Assurance reviews.

6.05 HAB ES

Announce Meeting with Draft Agenda:

A meeting announcement, with the draft agenda, is made to all HAB members and invited guests via e-mail approximately two weeks in advance of meeting. The e-mail announcement will also solicit suggested changes from HAB members.

HAB Members should review the agenda and provide suggested changes/additions to HAB ES. (Internal Customer Feedback).

Responsible Office- QE Subject: Executive Secretary for HEDS Assurance Board

6.06 HAB ES

Revise Agenda and Provide Meeting Reminder:

A reminder e-mail, (sample is provided in Appendix B-1) with the final agenda, is sent to HAB members and invited guests approximately three working days before HAB meeting to:

- 1. remind them of the date and time of the meeting,
- 2. ask them to provide any special phone numbers on which they should be called at the time of the meeting, otherwise the HAB ES will use the same number as the last HAB Meeting, and
- 3. ask them to send (by fax or e-mail) their viewgraphs to all members in advance of the meeting.

The HAB members notify the HAB ES if they will NOT be attending the HAB meeting. They will also notify the HAB ES of any changes from their usual phone number where they can be reached if attending via telecon.

Any presentations HAB Members will be making are provided to the HAB ES prior to the meeting. Each presenter is responsible for providing the presentations to all HAB Members.

6.07 HAB ES

Fax Telecon Listing to MSFC and Ensure HQ Members have Charts:

A telecon listing is faxed to MSFC Communications (see reference 4.2) on the Friday immediately before the meeting. Updates are made as necessary.

In the final days before the HAB meeting (up to and including the day of the meeting), the HAB ES will collect presentations from the HAB Members. The HAB ES will make paper copies for the AA/SMA, other invited guests, and OSMA staff who will attend the meeting at HQ. Before the meeting, the HAB ES will finalize the Agenda with the AA/SMA and publish the final agenda as a Quality Record.

The HAB ES goes to the meeting room (normally AA/SMA Conference Room) prior to the meeting to receive calls to establish the telecon; pre-position the agenda and presentations on the table.

6.08 AA/SMA

Chair Meeting:

The AA/SMA chairs the HAB meeting. At the meeting, the Chair will decide on timeframe, actionee(s) and criteria to close Action Items. Additionally, the Chair decides on the closure of reported Action Items. These decisions will be based on the Chair's professional expertise.

6.09 HAB ES

Prepare Draft Minutes:

The HAB ES takes minutes during meeting and plays any role prescribed by the agenda (such as reviewing action items assigned during the meeting). Within a few days of the meeting, the HAB ES prepares and sends the Draft Minutes to the HAB Members who review them and provide comments to the HAB ES. (Internal Customer Feedback).

Appendix B-2 contains a sample set of HAB Meeting Minutes.

6.10 HAB ES

Prepare Final Minutes of Meeting:

The HAB ES prepares the final minutes of the meeting dispositioning any comments received. The nominal distribution list is shown in Appendix B-2.

6.11 HAB ES with AA/SMA Concur on Minutes:

The HAB ES provides the minutes of the meeting to the AA/SMA and obtains AA/SMA concurrence prior to release. (Internal Customer Feedback).

6.12 QE Secretary

Enter HAB minutes into OSMA Correspondence Control, Action Items into HATS, Distribute and File:

The minutes are officially recorded and filed. Additionally, (rarely) any action items for the OSMA Staff are entered in the HATS (See HQOWI 1450-Q027)

The QE Secretary distributes the minutes and files them as a Quality Record.

6.13 HAB ES

Closeout:

The HAB ES ensures that all Quality Records are filed/processed and then closes out the process.

7. Quality Records

Record ID	Owner	Location	Media Electronic /hardcopy	Schedule Number & Item Number	Retention & Disposition
Final HAB Agenda and Charts	HAB ES	QE Files	Hardcopy	Schedule: 1 Item: 14.B.1.a	Keep until Final Meeting Minutes approved, verify that is contained in Meeting Minutes then destroy
HATS Action Item Record	HATS Admin	W/in HATS	Electronic	Schedule: 1 Item: 78.C	Keep as long as item has reference value or 1 year then transfer to NASA Historian
HAB Meeting Minutes	HAB ES	QE Files	Hardcopy	Schedule: 1 Item: 14.B.1.a	Retire to FRC when 2 years old then transfer to NARA when 20 years old *Permanent*

Appendix A: Nominal Process Schedule

Meeting - 3 weeks: Step 6.02

Meeting - 2 weeks: Step 6.05

Meeting - 3 days: Step 6.06

Meeting - 1 day: Step 6.07

Meeting day: Step 6.08

Meeting + 1 week: Step 6.12

Appendix B: Sample HEDS Assurance Board (HAB) Documents

- B.1. Sample HAB Meeting Announcement
- B.2 Sample HAB Meeting Minutes with Sample HAB Meeting Agenda

Appendix B-1: SAMPLE HAB Meeting Announcement

Date: Tue, 31 Aug 1999 07:24:45 -0400

To: fgregory@hq.nasa.gov, rick.d.husband1@jsc.nasa.gov, amanda.goodson@msfc.nasa.gov, john.l.gasery@ssc.nasa.gov, john.h.casper1@jsc.nasa.gov, brian.k.kelly1@jsc.nasa.gov, alarsen@ems.jsc.nasa.gov, fairejc@kscgws00.ksc.nasa.gov, pete.rutledge@hq.nasa.gov, jholsomb@ems.jsc.nasa.gov, w.j.harris@jsc.nasa.gov

From: Pete Rutledge <prutledg@hq.nasa.gov>

Subject: HEDS Assurance Board TELECON, September 7, 1999

Cc: marla.g.duhon1@jsc.nasa.gov, merrell.mcdaniel1@jsc.nasa.gov, diana.heberling@ssc.nasa.gov, dena.yell@msfc.nasa.gov, maryann.cresap1@jsc.nasa.gov, desiree.m.thompson1@jsc.nasa.gov, annette.loveday@msfc.nasa.gov, sfenn@hq.nasa.gov, jsandin@hq.nasa.gov, whill@hq.nasa.gov, rpatrica@hq.nasa.gov, brian.r.swindells1@jsc.nasa.gov, james.w.wade1@jsc.nasa.gov, merminge@ems.jsc.nasa.gov, sseyl@ems.jsc.nasa.gov, daryl.frank-1@kmail.ksc.nasa.gov, mike.smiles@msfc.nasa.gov

HAB members,

This is a reminder that we will be having our regular monthly meeting via telecon on Tuesday, September 7, 1999, from 3:30 to 4:30 PM, EDT. An agenda is attached. Feel free to suggest other topics that may need to be discussed. Please be sure you provide copies of your presentation charts to the other members prior to the telecon (to do this you can send your charts to the distribution list called "hab@lists.hq.nasa.gov" but only if you are a HAB member; i.e., someone on your staff cannot use this distribution list to send out your charts). You will be contacted at your usual telecon phone number (see attached revised membership listing); if you wish to be contacted on another number, please let me know.

Thanks,
Pete Rutledge

Appendix B-2: SAMPLE HAB Meeting Minutes

TO: Distribution

FROM: Q/Associate Administrator for Safety and Mission Assurance

SUBJECT: Minutes of Human Exploration and Development of Space (HEDS) Assurance Board

Meeting, October 1, 2001

The regular monthly meeting of the HEDS Assurance Board was held by telecon on October 1, 2001. Meeting minutes are enclosed.

Frederick D. Gregory

Enclosure

Distribution:

A/Mr. Goldin

M/Mr. Rothenberg

M-1/Mr. Readdy

Q/Dr. Greenfield

Q-1/Mr. Lengyel

QE/Mr. Hill

QE/Mr. Kowaleski

QE/Mr. Patrican

JSC/AA/Mr. Estess

CB/Ms. Collins

MA/Mr. Harris

MA2/Mr. Larsen

NA/Mr. Casper

NC/Mr. Erminger

OE/Mr. Holsomback

OE/Dr. Wade

OA/Mr. Davis

KSC/QA/Ms. Bartell

QA/Ms. Montgomery

QA/Mr. Garrido

MSFC/QS01/Dr. Goodson

SSC/QA00/Mr. Smiles

bcc:

Q/Chron File

HEDS File

Minutes -- Human Exploration and Development of Space (HEDS) Assurance Board (HAB) Meeting (telecon), October 1, 2001

Meeting Attendees:

Participating members:

Fred Gregory, AA/OSMA, Chairperson
Dr. Amanda Goodson, MSFC SMA
Mike Smiles, SSC SMA
John Casper, JSC SR&QA
Hank Davis, HEDS IA Director
Shannon Bartell, KSC SMA
Bill Harris, Space Shuttle Program Manager for SMA
Jerry Holsomback, ISS Manager for SMA
Skip Larsen, Chairperson, Payload Safety Review Panel
Eileen Collins, Chairperson, Space Flight Safety Panel
Dr. Pete Rutledge, Executive Secretary

Members Not Participating or Represented:

None

Other Participants:
Bill Hill, HQ, OSMA
Mark Kowaleski, HQ, OSMA
Dr. Jim Wade, ISS SMA
Scott Johnson, JSC SR&QA
Mark Erminger, JSC SR&QA
Scott Seyl, JSC SR&QA
Chris Cianciola, MSFC SMA
Alex Adams, MSFC SMA

Objective of the Meeting:

To cover the agenda found in Appendix A.

Proceedings:

<u>Introductory Remarks</u>. Fred Gregory asked for confirmation from the Board members that the time between the next and the last Shuttle flight would not affect safety. [The responses to this took place throughout the meeting.]

Space Shuttle (SSP) and International Space Station (ISS) Risks or other issues.

<u>SSP</u>: Bill Harris commented that the Shuttle was getting back to a more normal flow time [as opposed to getting too slow]. He mentioned that the USA performance evaluation period ended on September 30 and he had not heard any significant issues from anyone yet.

<u>ISS</u>: Jerry Holsomback mentioned that the pre-SORR would start in the morning. He mentioned a Russian experiment, Kromka, which is a witness plate mounted on the Service Module to help determine the level of contamination caused by the thrusters. The US needs to understand the hazards of handling the witness plate with regard to the contamination that may be present on it. There will be an Extra-Vehicular Activity (EVA) on October 14 wherein the plate will be handled.

The Program Risk Advisory Board met today [Jerry just returned from it]. The Independent Annual Review (IAR) conducted by the Independent Program Assessment Office (IPAO) reviewed the ISS risk process.

A 3-day meeting was held at JSC by the ISS Management and Cost Evaluation (IMCE) team. They are operating under an Office of Management and Budget (OMB) and NASA Administrator charter. The International Partners were in attendance to observe. There will be a follow-up meeting in Washington, DC, on October 9 and 10 and again at the end of October.

Mr. Estess talked to the ISS Program staff this morning; he praised them for an excellent job preparing for the IMCE meeting. Mr. Estess had been present for the entire IMCE meeting.

On orbit, the ISS is in good shape, with no major issues.

Skip Larsen mentioned that the Payload Safety Review Panel (PSRP) had approved the battery on the Kardionauka this afternoon. They determined that the battery was a Ni-Cad. He added that Kromka is still a concern.

JSC:

John Casper turned the JSC presentation over to Mark Erminger and Scott Johnson. Mark began with a verbal summary of the OMS pod problem. On OV-105, at attach point number 5, elongated holes were found. At this location is a round plate with 14 bolts that carry 90% of the load in the x-direction. Some testing will be done to better understand the problem.

Scott Johnson discussed Palmdale Ground Support Equipment (GSE) maintenance and storage issues from the charts at Appendix B. About \$40 million worth of GSE used for Orbiter Maintenance and Modification (OMMs) is not being maintained. Hardware damage or personal injury could result from degradation of the equipment if it is subsequently used. A Change Request is being processed for the funding needed to maintain the equipment. Pre-planning for OMM at KSC will determine what will have to go back to Palmdale for OMM work. Mark Erminger said there would be some major vehicle modifications done back at Palmdale in 4-5 years. Scott Johnson said that some GSE engineering lay-offs have taken place at Palmdale. Bill Hill asked if there was anything unique at Palmdale [as far as OMM GSE is concerned]. Scott said he was not aware of anything unique.

Discussion of the three remaining items in the JSC charts at Appendix B took place later in the meeting.

MSFC: Dr. Amanda Goodson introduced Chris Cianciola to discuss the issue of RSRM nozzle throat pocketing. [The charts at Appendix C, from another meeting, provide additional information on and illustration of this problem.] Testing had shown less wattage than expected was needed to damage the throat material. Fred Gregory asked if the test itself might be suspect. Chris said there would be more data available on Wednesday on which to base an answer to that question. Mark Erminger asked if the pocketing was self-limiting. It is. Amanda said that a team of Thiokol and MSFC phenolic experts were looking at the test results.

MSFC's usual charts are at Appendix D; they were not covered, but are self-explanatory.

Responsible Office- QE Subject: Executive Secretary for HEDS Assurance Board

KSC: Shannon Bartell said she was more concerned about Shuttle privatization (in regard to her independent assessment function) after the Process Verification just performed at KSC by Code Q. Concerning the length of time between Shuttle flights, Shannon said that at KSC they fill that time with extra training. Fred asked how KSC people get their training when the flight rate is higher. Shannon explained that the training was in the form of simulations to keep skills sharpened. When the flight rate is higher, simulations are not needed because people are staying sharp as a result of real operational experience. In summary she said that KSC has no safety concerns about the length of time between the last and the next Shuttle flight.

<u>SSC:</u> Mike Smiles said that with the slower flight rate there was time to dig more deeply and uncover new problems.

<u>Payloads:</u> Skip Larsen talked about the agreements the PSRP has with the Russians. The PSRP is supposed to have 120 days to review Russian experiment data before launch. For complex experiments, the time is 180 days. Most recently the PSRP was getting only 30 days to review the experiments. They try their best to accomplish the review but it is difficult. Skip has found that Pavel Voroviev is getting the review packages late in Russia, as well. Fred asked Skip if it is possible, with the short time available, to give the experiments the scrutiny they need. Skip said it is possible but that the process is broken.

<u>Crew Safety:</u> Eileen Collins mentioned an IG inspection that was starting to look at the size of the astronaut corps. There are about 140-160 astronauts now. A previous study said that only 67 were needed, if they did not do additional technical work. Eileen cautioned that we remember the Rogers Commission report that called for wide astronaut involvement in the Agency. Fred said he was not aware of the IG study. He asked Eileen if she had any issues with the Shuttle flight rate. She said was not sure about concerns with the low flight rate; she offered to look at past Space Flight Safety Panel studies of the issue; e.g., those by Blaha and Bloomfield, and to see if anything has changed.

Other HEDS Risks or other issues. Fred Gregory asked if there were any other issues; there were none.

<u>HEDS Independent Assessment (IA).</u> Hank Davis had no issues and said he would look into the reduced flight rate question. Fred said that we were probably headed toward a rate of 3-4 flights per year.

Review of Action Items.

{NOTE: For this example, only Appendix A is provided}

Action Look into low flight rate safety issue	Assignee Hank Davis Eileen Collins	<u>Status</u> Open
	Litech Collins	
Closing. The meeting ended at approximat	ely 4:40 p.m. EDT.	
Next Meeting. The next meeting will be a November telecon is at Appendix E.	telecon on Thursday	, November 8, 2001. A draft agenda for the
Peter J. Rutledge, Ph.D. Executive Secretary	Concurrence:	Frederick D. Gregory AA OSMA, Chairperson
5 Appendices		1

Appendix A

HEDS Assurance Board TELECON, October 1, 2001

Time: 3:30-4:30 PM (EDT) or 2:30-3:30 PM (CDT)

Agenda

Introductory remarks Fred Gregory

Space Shuttle (SSP) and International Space Station (ISS) Risks or other issues

SSP SMA Bill Harris

ISS SMA Jerry Holsomback

JSC John Casper

MSFC Amanda Goodson
KSC Shannon Bartell

Other HEDS risks or other issues All

HEDS Independent Assessment (IA)

Hank Davis

Review action items/next meeting Pete Rutledge

Closing Remarks Fred Gregory